MYLAR/POLYESTER FILM

MLR SERIES

The MLR series is a range of radial lead non–polarized polyester film (Mylar) capacitors dipped in a hard epoxy coating material to provide excellent protection against moisture. These devices are intended for general purpose DC applications.

RATINGS

Capacitance Range: .001µf to 5.6µf
Voltage Range: 50V to 630V DC (35V to 250V AC)
Tolerance: ±10%
Withstand Voltage: 175%

PERFORMANCE SPECIFICATIONS

Operating Temperature Range:
–55°C to +85°C (–67°F to +185°F)
Dissipation Factor: 1% Max
Capacitance Tolerance (K): ±10%
measured @ +25°C (+77°F), 1kH$_Z$, for values up to and including 1µf
measured @ +25°C (+77°F), 120H$_Z$, for values above 1µf
Insulation Resistance:

50V & 100V,	.001µf – .1µf =	30,000MΩ Min
	.12µf – 2.2µf =	10,000MΩ Min
250V,	.01µf – 5.6µf =	10,000MΩ Min
400V,	.0047µf – 4.0µf =	10,000MΩ Min
630V,	.001µf – .008µf =	100,000MΩ Min
	.01µf – 3.0µf =	10,000MΩ Min

Life Test: 1000Hrs @ +85°C (+185°F)
at 150% rated voltage

ORDERING INFORMATION

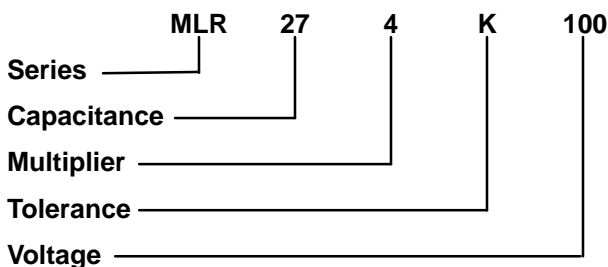
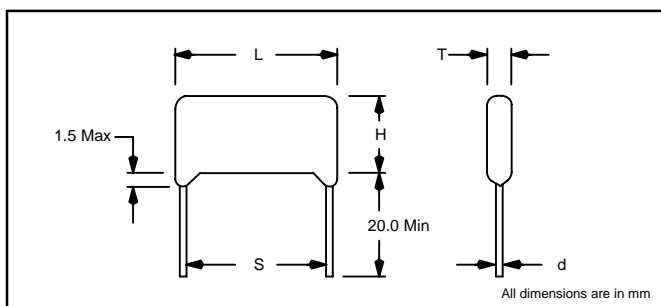



FIGURE 1

MECHANICAL SPECIFICATIONS (Figure 1)

50 Volt (35VAC) Series Dimensions (mm)

Cap µf	Code	T	H	L	S	d
.001	102	3.0	7.5	5.5	3.5 ±1.0	0.5
.0033	332	3.0	7.5	5.5	3.5 ±1.0	0.5
.01	103	3.0	7.5	6.0	3.5 ±1.0	0.5
.012	123	3.0	9.0	6.0	3.5 ±1.0	0.5
.018	183	3.5	9.0	6.5	3.5 ±1.0	0.5
.027	273	4.0	9.5	6.5	3.5 ±1.0	0.5
.033	333	4.0	9.5	6.5	3.5 ±1.0	0.5
.039	393	4.5	9.5	7.5	5.0 ±1.5	0.5
.047	473	4.5	9.5	7.5	5.0 ±1.5	0.5
.1	104	5.5	10.5	9.0	5.0 ±1.5	0.5
.15	154	6.0	10.0	14.0	10.0 ±1.5	0.6
.27	274	6.0	11.0	14.0	10.0 ±1.5	0.6
.33	334	6.0	12.0	14.0	10.0 ±1.5	0.6
1.0	105	9.0	15.0	18.0	15.0 ±1.5	0.6

100 Volt (65VAC) Series Dimensions (mm)

Cap µf	Code	T	H	L	S	d
.001	102	3.0	7.5	5.5	3.5 ±1.0	0.5
.0012	122	3.0	7.5	5.5	3.5 ±1.0	0.5
.0015	152	3.0	7.5	5.5	3.5 ±1.0	0.5
.0018	182	3.0	7.5	5.5	3.5 ±1.0	0.5
.002	202	3.0	7.5	5.5	3.5 ±1.0	0.5
.0022	222	3.0	7.5	5.5	3.5 ±1.0	0.5
.0027	272	3.0	7.5	5.5	3.5 ±1.0	0.5
.0033	332	3.0	7.5	5.5	3.5 ±1.0	0.5
.0039	392	3.0	7.5	5.5	3.5 ±1.0	0.5
.0047	472	3.0	7.5	5.5	3.5 ±1.0	0.5
.0056	562	3.0	7.5	5.5	3.5 ±1.0	0.5
.0068	682	3.0	7.5	5.5	3.5 ±1.0	0.5
.0082	822	3.0	7.5	6.0	3.5 ±1.0	0.5
.01	103	3.0	7.5	6.0	3.5 ±1.0	0.5
.012	123	3.0	9.0	6.0	3.5 ±1.0	0.5
.015	153	3.0	9.0	6.0	3.5 ±1.0	0.5
.018	183	3.5	9.0	6.5	3.5 ±1.0	0.5
.022	223	3.5	9.0	6.5	3.5 ±1.0	0.5
.027	273	4.0	9.5	6.5	3.5 ±1.0	0.5
.033	333	4.0	9.5	6.5	3.5 ±1.0	0.5
.039	393	4.5	9.5	7.5	5.0 ±1.5	0.5
.047	473	4.5	9.5	7.5	5.0 ±1.5	0.5
.056	563	4.5	10.5	8.0	5.0 ±1.5	0.5
.068	683	4.5	10.5	8.0	5.0 ±1.5	0.5
.082	823	5.5	10.5	9.0	5.0 ±1.5	0.5
.1	104	5.5	10.5	9.0	5.0 ±1.5	0.5
.12	124	6.0	12.0	14.0	10.0 ±1.5	0.6
.15	154	6.0	10.0	14.0	10.0 ±1.5	0.6
.18	184	6.0	10.0	14.0	10.0 ±1.5	0.6
.22	224	6.0	10.0	14.0	10.0 ±1.5	0.6
.27	274	6.0	11.0	14.0	10.0 ±1.5	0.6
.33	334	6.0	12.0	14.0	10.0 ±1.5	0.6
.39	394	6.0	12.0	18.0	15.0 ±1.5	0.6
.47	474	6.0	12.0	18.0	15.0 ±1.5	0.6
.56	564	7.0	14.0	18.0	15.0 ±1.5	0.6
.68	684	7.0	14.0	18.0	15.0 ±1.5	0.6
.82	824	9.0	15.0	18.0	15.0 ±1.5	0.6
1.0	105	9.0	15.0	18.0	15.0 ±1.5	0.6
2.2	225	11.0	20.0	24.0	20.0 ±1.5	0.8

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250 Volt (125VAC) Series Dimensions (mm)

Cap µf	Code	T	H	L	S	d
.01	103	6.0	10.0	14.0	10 ±1.5	0.6
.015	153	6.0	10.0	14.0	10 ±1.5	0.6
.022	223	6.0	10.0	14.0	10 ±1.5	0.6
.027	273	6.0	10.0	14.0	10 ±1.5	0.6
.033	333	6.0	10.0	14.0	10 ±1.5	0.6
.047	473	6.0	10.0	14.0	10 ±1.5	0.6
.068	683	6.0	10.0	14.0	10 ±1.5	0.6
.082	823	7.0	10.0	14.0	10 ±1.5	0.6
.1	104	7.0	10.0	14.0	10 ±1.5	0.6
.12	124	7.0	11.0	14.0	10 ±1.5	0.6
.15	154	7.0	11.0	18.0	15 ±1.5	0.6
.18	184	7.0	12.0	18.0	15 ±1.5	0.6
.22	224	7.0	12.0	18.0	15 ±1.5	0.6
.27	274	7.0	13.0	18.0	15 ±1.5	0.6
.33	334	7.0	13.0	18.0	15 ±1.5	0.6
.39	394	8.0	15.0	18.0	15 ±1.5	0.8
.47	474	8.0	15.0	24.0	20 ±1.5	0.8
.56	564	9.0	15.5	24.0	20 ±1.5	0.8
.68	684	9.0	15.5	24.0	20 ±1.5	0.8
.82	824	10.0	17.0	24.0	20 ±1.5	0.8
1.0	105	10.0	17.0	24.0	20 ±1.5	0.8
1.2	125	10.0	19.5	24.0	20 ±1.5	0.8
1.5	155	10.0	19.5	31.0	27.5 ±1.5	0.8
1.8	185	11.0	20.0	31.0	27.5 ±1.5	0.8
2.2	225	13.0	22.0	31.0	27.5 ±1.5	0.8
3.3	335	16.0	26.0	31.0	27.5 ±1.5	0.8
4.7	475	16.0	26.0	35.0	27.5 ±1.5	0.8
5.6	565	16.0	26.0	35.0	27.5 ±1.5	0.8

400 Volt (200VAC) Series Dimensions (mm)

Cap µf	Code	T	H	L	S	d
.0047	472	6.0	10.0	14.0	10 ±1.5	0.6
.01	103	6.0	10.0	14.0	10 ±1.5	0.6
.015	153	6.0	10.0	14.0	10 ±1.5	0.6
.022	223	6.0	10.0	14.0	10 ±1.5	0.6
.033	333	6.0	10.0	14.0	10 ±1.5	0.6
.047	473	8.0	11.0	14.0	10 ±1.5	0.6
.056	563	8.0	13.0	14.0	10 ±1.5	0.6
.068	683	6.0	13.0	18.0	15 ±1.5	0.6
.082	823	6.0	13.0	18.0	15 ±1.5	0.6
.1	104	6.0	13.0	18.0	15 ±1.5	0.6
.12	124	7.0	14.0	18.0	15 ±1.5	0.6
.15	154	7.0	14.0	18.0	15 ±1.5	0.6
.18	184	8.0	16.0	18.0	15 ±1.5	0.8
.22	224	8.0	16.0	24.0	20 ±1.5	0.8
.27	274	9.0	16.0	24.0	20 ±1.5	0.8
.33	334	9.0	16.0	24.0	20 ±1.5	0.8
.39	394	9.5	17.0	24.0	20 ±1.5	0.8
.47	474	10.0	18.0	24.0	20 ±1.5	0.8
.56	564	10.5	18.0	30.0	27.5 ±1.5	0.8
.68	684	10.5	18.0	30.0	27.5 ±1.5	0.8
.82	824	12.0	22.0	30.0	27.5 ±1.5	0.8
1.0	105	12.0	22.0	30.0	27.5 ±1.5	0.8
1.5	155	15.0	24.5	30.0	26.5 ±1.5	0.8
2.0	205	18.0	26.5	30.0	26.5 ±1.5	0.8
3.0	305	19.0	28.5	37.0	31 ±1.5	0.8
4.0	405	23.5	32.0	37.0	31 ±1.5	0.8

630 Volt (250VAC) Series Dimensions (mm)

Cap µf	Code	T	H	L	S	d
.001	102	5.54	8.28	17.63	13.84 ±1.3	0.6
.0012	122	5.87	8.62	17.63	13.84 ±1.3	0.6
.0015	152	5.61	8.36	17.63	13.84 ±1.3	0.6
.0018	182	5.95	8.69	17.63	13.84 ±1.3	0.6
.0022	222	6.38	9.12	17.63	13.84 ±1.3	0.6
.0025	252	7.12	9.61	17.63	13.84 ±1.3	0.8
.0027	272	7.12	9.61	17.63	13.84 ±1.3	0.8
.003	302	6.38	9.55	17.63	13.84 ±1.3	0.8
.0033	332	6.38	9.55	17.63	13.84 ±1.3	0.8
.0039	392	6.76	9.94	17.63	13.84 ±1.3	0.8
.0047	472	7.20	10.39	17.63	13.84 ±1.3	0.8
.005	502	7.68	10.85	17.63	13.84 ±1.3	0.8
.0056	562	7.68	10.85	17.63	13.84 ±1.3	0.8
.0068	682	7.95	11.79	17.63	13.84 ±1.3	0.8
.0082	822	8.53	12.37	17.63	13.84 ±1.3	0.8
.01	103	6.00	10.00	14.00	10.00 ±1.5	0.6
.012	123	6.00	11.00	14.00	10.00 ±1.5	0.6
.015	153	6.50	11.50	14.00	10.00 ±1.5	0.6
.018	183	7.00	12.00	14.00	10.00 ±1.5	0.6
.022	223	7.00	12.50	14.00	10.00 ±1.5	0.6
.027	273	6.00	11.00	18.00	15.00 ±1.5	0.6
.033	333	7.00	12.00	18.00	15.00 ±1.5	0.6
.039	393	7.00	12.50	18.00	15.00 ±1.5	0.6
.047	473	7.50	12.50	18.00	15.00 ±1.5	0.6
.05	503	7.50	12.50	18.00	15.00 ±1.5	0.6
.056	563	8.50	14.50	18.00	15.00 ±1.5	0.6
.068	683	8.50	14.50	18.00	15.00 ±1.5	0.6
.082	823	9.00	15.50	18.00	15.00 ±1.5	0.8
.1	104	9.00	14.00	24.00	20.00 ±1.5	0.8
.12	124	10.00	17.00	24.00	20.00 ±1.5	0.8
.15	154	10.00	17.00	24.00	20.00 ±1.5	0.8
.18	184	11.00	20.00	24.00	20.00 ±1.5	0.8
.22	224	11.00	20.00	24.00	20.00 ±1.5	0.8
.25	254	11.00	20.00	24.00	20.00 ±1.5	0.8
.27	274	12.00	20.00	24.00	20.00 ±1.5	0.8
.33	334	11.00	20.00	24.00	27.50 ±1.5	0.8
.39	394	13.00	22.00	30.00	27.50 ±1.5	0.8
.47	474	13.00	22.00	30.00	27.50 ±1.5	0.8
.5	504	13.00	22.00	30.00	27.50 ±1.5	0.8
.56	564	14.00	23.00	31.00	27.50 ±1.5	0.8
.68	684	15.00	26.00	31.00	27.50 ±1.5	0.8
1.0	105	17.00	30.00	31.00	27.50 ±1.5	0.8
1.5	155	20.00	30.00	37.00	31.00 ±1.5	0.8
1.8	185	19.00	28.00	46.00	41.00 ±1.5	0.8
2.0	205	20.50	30.00	46.00	41.00 ±1.5	0.8
3.0	305	21.00	35.00	45.00	38.00 ±1.5	0.8